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AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (Previously Presented) A process for preparing cyclic phosphonic anhydride of the formula (III) by
- a) reaction of a phosphonic acid derivative of the formula (I) with acetic anhydride at a temperature in the range from 30 to 150°C and simultaneous distillative removal of a mixture of acetic acid and acetic anhydride,
- b) subsequent reactive distillation of the oligomeric phosphonic anhydride of the formula (II) obtained in step a) and conversion to the corresponding cyclic trimeric phosphonic anhydride of the formula (III)

HO-P-OH
$$\xrightarrow{\text{distillation}}$$
 HO-P-OH $\xrightarrow{\text{R}}$ R $\xrightarrow{\text$

where

n is an integer from 0 to 300 and

R are allyl, aryl or open-chain cyclic or branched C_1 to C_8 -alkyl radicals, aryloxy, allyloxy or alkoxy having open-chain cyclic or branched C_1 to C_8 -alkyl radicals.

2. (Previously Presented) The process as claimed in claim 1, wherein the cyclic trimeric phosphonic anhydride formed in step b) is immediately dissolved in an organic solvent which is inert toward them.

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3.(Previously Presented) The process as claimed in claim 1, wherein the ratio of acetic anhydride to phosphonic acid of the formula (I) is in the range of 20:1 and 1:1.

- 4.(Previously Presented) The process as claimed in claim 1, wherein the reactive distillation in step b) is effected at a temperature in the range from 100 to 450°C (the internal reactor temperature) and a top temperature of from 100 to 380°C.
- 5. (Previously Presented) The process as claimed in claim 1, wherein the pressure in
- a) the distillation of acetic acid and unconverted acetic anhydride is between 1 mbar and 1000 mbar, and
- b) in the reactive distillation of the oligomeric phosphonic anhydride of the formula (II) to give the cyclic phosphonic anhydride of the formula (III) is within a pressure range between 0.001 mbar and 500 mbar.
- 6. (Previously Presented) The process of claim 1, wherein said process is carried out continuously.
- 7. (Previously Presented) The process of claim 1, wherein the resulting cyclic trimeric phosphonic anhydride of the formula (III), after the reactive distillation, is dissolved in an organic solvent in a mixing ratio of solvent to phosphonic anhydride in the range of 10:1 and 1:10.
- 8. (Previously Presented) The process of claim 1, wherein the organic solvent is selected form the group consisting of ligroin, sulfolane, DMSO, HMPT, NMP, pentane, hexane, heptane, octane, cyclopentane, cyclohexane, cyclohexane, cyclooctane, dichloromethane, chloroform, carbon tetrachloride, 1,2-dichloroethane, 1,1,2,2-tetrachloroethane, methyl acetate, ethyl acetate, propyl acetate, butyl acetate, dimethylformamide, diethylformamide, dimethylacetamide, diethylacetamide, diethylacetamide, diethyl ether, diisopropyl ether, tert-butyl methyl ether, THF, dioxane, acetonitrile, sulfolane, DMSO, HMPT, NMP, and mixtures thereof.
- 9. (Canceled)

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10. (Previously Presented) A process for preparing cyclic phosphonic anhydride as claimed in Claim 1, wherein R is an open-chain, cyclic or branched C_1 to C_8 - alkyl radical.

- 11. (Previously Presented) A process for preparing cyclic phosphonic anhydride of the formula (III) by
- a) reaction of a phosphonic acid derivative of the formula (I) with acetic anhydride at a temperature in the range from 30 to 150°C and simultaneous distillative removal of a mixture of acetic acid and acetic anhydride,
- b) subsequent reactive distillation of the oligomeric phosphonic anhydride of the formula (II) obtained in step a) and conversion to the corresponding cyclic trimeric phosphonic anhydride of the formula (III)

where

n is 1 and

R is propyl.

- 12. (New) A process for preparing cyclic phosphonic anhydride comprising
- a) reacting phosphonic acid derivative with acetic anhydride at a temperature in the range from 30 to 150°C and simultaneous distillative removal of a mixture of acetic acid and acetic anhydride,
- b) subsequently reactively distilling the oligomeric phosphonic anhydride obtained in step a) and conversion to the corresponding cyclic trimeric phosphonic anhydride.